Title: Actuator Control System for Hydraulic
Devices
Docket No: CPW-003
Express Mail No.: EU693574938US
William G. Guerin (508-303-2003)
Sheet: 1/4

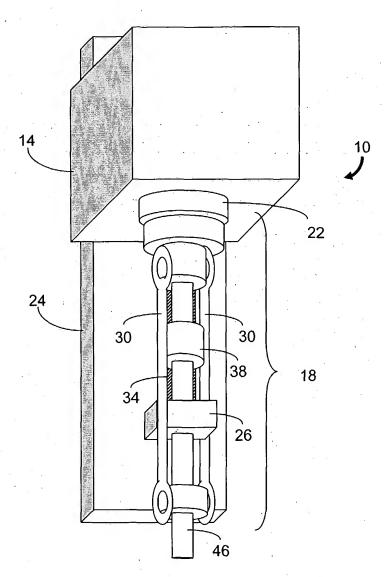
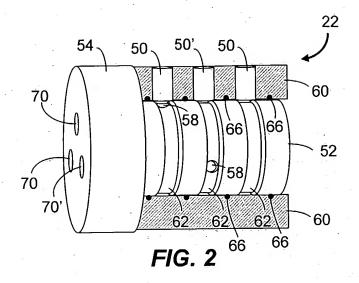
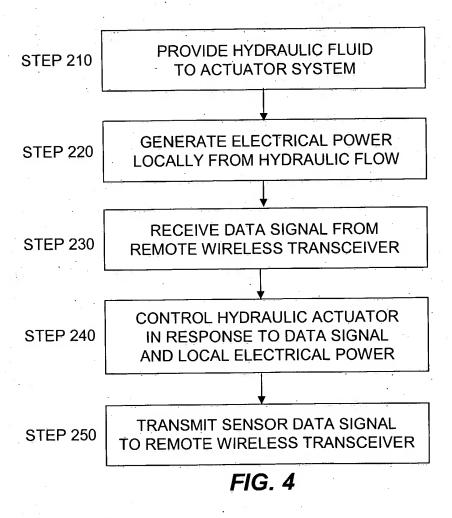


FIG. 1

Title: Actuator Control System for Hydraulic Devices Docket No.: CPW-003 Express Mail No.: EU693574938US William G. Guerin (508-303-2003) Sheet 2/4





Title: Actuator Control System for Hydraulic Devices Docket No.: CPW-003 Express Mail No.: EU693574938US William G. Guerin (508-303-2003) Sheet 3/4 SENSOR 102 SENSOR 102 SENSOR 102 78 106 106 TRANSCEIVER **→**CONTROLLER 158 WIRELESS DSP 98 90 88 ACTUATOR 122 TRANSCEIVER ACTUATOR 94 ELECTRICAL 86) HYDRAULIC WIRELESS 154 RECTIFIER 130 118 BOOST 142 110 CONTROLLER ACTUATOR 94 ACTUATOR 122 ELECTRICAL HYDRAULIC 86 AC GENERATOR_ 82 152 130 118 138 110 ACTUATOR 122 ACTUATOR 94 MODULE 150 HYDRAULIC ELECTRICAL OPERATOR CONTROL HYDRAULIC MOTOR 134 86 130 118~ 110 RETURN 126 HYDRAULIC POWER UNIT 146 FEED

Docket No.: CPW-003 Express Mail No.: EU693574938US William G. Guerin (508-303-2003) Sheet 4/4: SENSOR SENSOR SENSOR 102 102 102 158 DSP 86 CONTROLLER **TRANSCEIVER TRANSCEIVER** WIRELESS WIRELESS 94 -98 154 ACTUATOR 122 **ACTUATOR** 94 ELECTRICAL HYDRAULIC .98 130 HYDRAULIC ACTUATOR 122 718 ACTUATOR 94 ELECTRICAL SENSOR ► RECTIFIER 130 6 102 BOOST 110 82 110 86 -118 ACTUATOR 122 CONTROLLER ACTUATOR 94 ELECTRICAL HYDRAULIC AGENERATOR— 130 SENSOR **ACTUATOR** 94 118 ACTUATOR 122 110 198-4 ELECTRICAL HYDRAULIC DSP ROTATABLE PORTION 18' 152 102 130 -86 -98110 ACTUATOR 122 ACTUATOR 94 SENSOR ELECTRICAL HYDRAULIC HYDRAULIC ACTUATOR 122 130 102 ACTUATOR 94 7138 HYDRAULIC ELECTRICAL MOTOR 134 78 130 86 110 STATIONARY **PORTION** ROTARY SEAL 4 RETURN 22, 126 FEED 162 150 POWER SOURCE POWER UNIT ELECTRICAL HYDRAULIC OPERATOR CONTROL MODULE 146

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